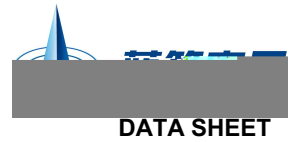


/ Revised record

			V _{CBO} V _{CEO} V _{EBO} I _{CEO}		

BRMMBT5401Q

Rev.A Feb.-2022



Silicon PNP transistor in a SOT-23 Plastic Package.

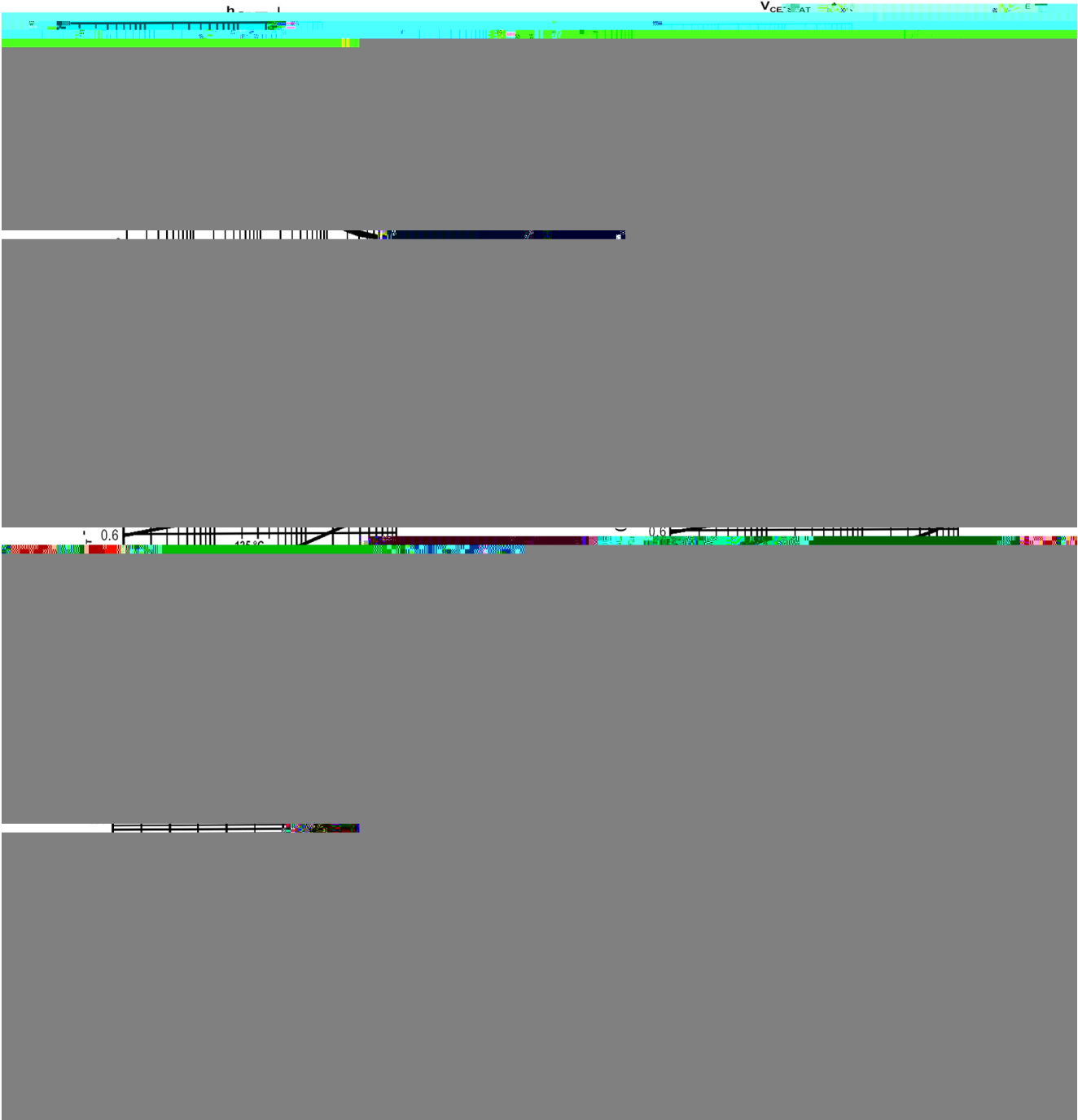
High voltage, com

Parameter	Symbol	Rating	Unit
Collector to Base Voltage	V_{CBO}	-180	V
Collector to Emitter Voltage	V_{CEO}	-160	V
Emitter to Base Voltage	V_{EBO}	-6.0	V
Collector Current	I_C	-600	mA
Base Current	I_B	-300	mA
Collector Power Dissipation	P_C	300	mW
Junction Temperature	T_j	150	°C
Storage Temperature Range	T_{stg}	-55~150	°C

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector to Base Voltage	V_{CBO}	$I_C = -100\mu A$ $I_E = 0$	-180		-	V
Collector to Emitter Voltage	V_{CEO}	$I_C = -500\mu A$ $I_B = 0$	-160			V
Emitter to Base Voltage	V_{EBO}	$I_E = -100\mu A$ $I_C = 0$	-6.0			V
Collector Cut-Off Current	I_{CBO}	$V_{CB} = -180V$ $I_E = 0$			-0.1	μA
Collector Cut-Off Current	I_{CEO}	$V_{CE} = -160V$ $I_B = 0$			-5.0	μA
Emitter Cut-Off Current	I_{EBO}	$V_{EB} = -6.0V$ $I_C = 0$			-0.1	μA
DC Current Gain	$h_{FE(1)}$	$V_{CE} = -5.0V$ $I_C = -10mA$	50	200	400	
	$h_{FE(2)}$	$V_{CE} = -5.0V$ $I_C = -50mA$	20	70		
	$h_{FE(3)}$	$V_{CE} = -5.0V$ $I_C = -1.0mA$	40	180		
Collector-Emitter Saturation Voltage	$V_{CE(sat) (1)}$	$I_C = -10mA$ $I_B = -1.0mA$		-0.12	-0.4	V
	$V_{CE(sat) (2)}$	$I_C = -50mA$ $I_B = -5.0mA$		-0.5	-0.8	V
Base-Emitter Saturation Voltage	$V_{BE(sat) (1)}$	$I_C = -10mA$ $I_B = -1.0mA$		-0.75	-1.0	V
	$V_{BE(sat) (2)}$	$I_C = -50mA$ $I_B = -5.0mA$		-0.8	-1.0	V
Base-Emitter Voltage	V_{BE}	$V_{CE} = -5.0V$ $I_C = -10mA$		-0.7	-0.75	V
Transition Frequency	f_T	$V_{CE} = -10V$ $I_C = -10mA$	50	80		MHz

Collector Output CapacC

/ Electrical Characteristic Curve



/ Marking Instructions

Q

2L

A h_{FE}

Note:

Q: Automobile halogen-free product Code

2L Product Type Code

A h_{FE} Classifications Symbol Code

Note:

1. Preheating: 150~200°C, Time: 60~120sec.
2. Peak Temp.: 255±5°C, Duration: 5±0.5sec.
3. Cooling Speed: 2~10°C/sec.

Soldering Heat Test Conditions

Time: 10±1 sec.

Temp.: 260±5°C

Time: 10±1 sec

SPEC.

Units 包装数量					Dimension 包装尺寸 (unit: mm ³)		
Units/Reel 只/卷盘	Reels/Inner Box 卷盘/盒	Units/Inner Box 只/盒	Inner Boxes/Outer Box 盒/箱	Units/Outer Box 只/箱	Reel	Inner Box 盒	Outer Box 箱